APPENDIX F

EMERGENCY MEDICAL TREATMENT

1. **General Instructions for the EFMB Test Board.**

The candidate will be required to complete the eleven tasks listed below within a one hour time limit, and pass eight of the eleven tasks. These tasks will be tested under simulated combat conditions in a battlefield scenario. The candidate must pack two aid bags in accordance with a packing list provided by the EFMB test board. The candidate will be placed in a scenario with four to six simulated casualties who have a maximum of two injuries each and who must receive proper triage and treatment within the one hour time limit. If at the end of the 1 hour any task, to include completing a DD Form 1380 (U.S Field Medical Card) for each casualty, is incomplete, the candidate will receive a NOGO for tasks not completed.

2. **Objective.**

To measure the candidates, ability to apply emergency medical treatment skills under simulated combat conditions in a battlefield scenario.

3. **General Condition Statement.**

These tasks will be tested in a lane using reaction testing.

4. **The following tasks are referenced in STP 21-1-SMCT, dated October 1994:**

a. Evaluate casualties and perform triage.

b. Prevent Shock, 081-831-1005.

c. Put on a Field Dressing, 081-831-1016.

d. Put on a Pressure Dressing, 081-831-1016.

e. Put on a Tourniquet, 081-831-1017.

f. Apply a Dressing to an Open Abdominal Wound, 081-831-1025.

g. Apply a Dressing to an Open Head Wound, 081-831-1033.

h. Splint a Suspected Fracture, 081-831-1034.

i. Apply a Dressing to an Open (Sucking) Chest Wound (STP 21-1SMCT).

5. **The standards for the following tasks with applicable references are stated in this study guide:**

a. Evaluate a Casualty and perform Triage (FM 8-10-6, FM 8-10, STP21-1 SMCT)

b. Initiate a DD Form 1380 (FM 8-10-6).

c. Initiate an IV Infusion (FM 8-230).

Section I

TRIAGE AND CASUALTY ASSESSMENT

F-1. **General.**

Triage (pronounced tree-ahzh) is the French word for "sorting." In medicine, it refers to the sorting of casualties to establish priorities of treatment and evacuation. Triage is generally applied to situations in which there are several casualties; however, the word can also refer to the assessment of one casualty with multiple injuries in order to decide which injury should be treated first. In this chapter, we will examine triage and the techniques used when dealing with mass casualty situations.

F-2. **Principles of Triage.**

Whether you are dealing with one casualty who has multiple injuries or many injured people, the fundamental principles of triage are the same:

a. Asphyxia and hemorrhage are the two immediate threats to life.

b. Salvage of life takes priority over salvage of the limb.

NOTE

These two principles should guide all of your work with critically injured patients and dictate the priorities of treatment.

F-3. **Triage of the Multiple Injury Casualty.**

You may not have used the word "triage" before, but every time you have performed the proper sequence of treatment, you were performing triage: sorting out the casualty's problems according to priorities. Triage of the multiple injured casualty begins with the primary survey, with emphasis on Airway, Breathing, and Circulation (ABC's).

a. Airway. The airway remains the first consideration. The trauma victim, if unconscious, will have his airway obstructed by the base of his tongue. The usual solution of tilting the head back is not adequate because every severely injured, unconscious victim is considered to have a cervical spine injury until proven otherwise. The approach is modified by using the jaw thrust method of opening the airway. By using this method, any motion of the head and/or neck is avoided. The tongue, blood, vomitus, avulsed teeth, or broken dentures may obstruct the airway of a trauma victim. To insure that the airway of the trauma victim is open you must:

(1) Open the airway, avoiding any movement of the head or neck.

(2) Clear foreign material manually or with suction. Remember to always anticipate vomiting.

(3) Keep the unconscious casualty turned on one side (after the spine is properly stabilized) so that foreign materials can drain from the casualty's mouth.

(4) Facial fractures around the mouth and trachea are extreme emergencies and the casualty should be evacuated immediately.

b. Breathing. Ensure the casualty is breathing adequately. If the victim is not breathing, artificial ventilation must be started promptly and supplemented as soon as possible with high concentrations of oxygen. Even if the casualty is making respiratory efforts, there are a number of injuries that can decrease the effectiveness of the respirations. For instance, sucking chest wounds will prevent adequate expansion of the lung; these wounds must be closed without delay. To ensure respiration in the trauma victim, you must:

(1) Start artificial ventilation for apnea.

(2) Close sucking chest wounds.

(3) Decompress the chest at once or evacuate the victim without delay if tension pneumothorax is evident.

(4) Note presence of flail chest (stabilize later).

(5) Give oxygen to every severely injured casualty.

c. Circulation. When we discuss circulation in the context of trauma, we are talking about control of bleeding and treatment of shock.

Both actions must be accomplished as rapidly as possible once the airway and breathing have been insured. To ensure circulation in a trauma victim, you must:

(1) Start external cardiac compressions, if there is no pulse.

(2) Control bleeding with direct pressure.

(3) Anticipate shock in every severely injured casualty and treat accordingly.

F-4. **The Secondary Survey.**

Having dealt with the ABC'S, you have now taken care of the conditions that pose an immediate threat to life. Recall, however, the second principle of triage: salvage of life takes priority over salvage of limb. This means that a casualty may have to be moved before treatment is completed. For instance, a casualty with pericardial tamponade must be evacuated with all possible speed, even if splinting of fractures has not been completed.

F-5. **Multiple Casualties.**

Situations involving several casualties may be the most difficult and challenging you will face. Not only does the multiple casualty situation require you to employ the skills of judgment and emergency care, but it also demands that these skills be exercised under frequently difficult conditions.

F-6. **Sorting of Casualties.**

The goal of this process is to accomplish the greatest good for the greatest number, remembering that the highest priority is keeping the casualty alive. Sorting of casualties (triage) is conducted in several rounds. On the first round, you should identify those casualties who require immediate attention according to the familiar priorities of Airway, Breathing, and Circulation (ABCs).

F-7. **Categories of Triage.**

a. Immediate-to Save Life or Limb.

(1) Airway obstruction.

(2) Respiratory and cardiorespiratory failure (cardiorespiratory failure is not considered an "immediate" condition on the battlefield; it would be classified as expectant).

(3) Massive external bleeding.

(4) Shock.

(5) Sucking chest wound, if respiratory distress is evident.

(6) Second or third degree burns of the face and neck, or perineum (causing shock or respiratory distress).

(7) After casualty with life/limb threatening conditions has been initially treated, no further treatment will be given until other "immediate" casualties have been treated.

b. Delayed-Less Risk by Treatment Being Delayed.

(1) Open chest wound.

(2) Penetrating abdomen wound.

(3) Severe eye injury.

(4) A vascular limb without apparent blood supply.

(5) Other open wounds.
(6) Fractures.

(7) Second and third degree burns not involving the face and neck or perineum.

c. Minimal-Can Be Self Aid or Buddy Aid.

(1) Minor lacerations.

(2) Contusions.

(3) Sprains.

(4) Minor combat stress problems.

(5) Partial thickness burns (under 20 percent).

(6) Casualties in this category are not evacuated to treatment facility.

d. Expectant-Little Hope of Recovery. This category should be used only if resources are limited. Example: Massive head injury with signs of impending death.

Section II

INTRAVENOUS INFUSIONS

F-8. **General.**

a. Intravenous infusions (IV) are started for two primary reasons:

(1) To provide a route for replacement of fluid, electrolytes, or blood products.

(2) To provide a direct way of administering drugs. In cases of low cardiac output (shock), blood is shifted away from the skin and skeletal muscles; drugs administered subcutaneously or intramuscularly are absorbed at a slow and unpredictable rate. Intravenous infusion insures that drugs reach the circulatory system promptly.

b. Intravenous needles (cannulas) are designed for three different applications:

(1) Hollow needle (also known as the butterfly).

(2) Plastic catheter inserted over a hollow needle (angiocath).

(3) Plastic catheter inserted through a hollow needle.

NOTE

The over-the-needle catheter is generally preferred because it is more easily secured and less cumbersome than the other types. The catheter used should be a large bore (14 to 16 gauge for an adult), particularly if large quantities of fluid must be infused.

F-9. **Procedure for Starting an Intravenous Infusion.**

a. Explain to the casualty what is going to be done.

(1) Very few people are entirely free from anxiety about needles and IV's; when they are ill, these anxieties

increase.

(2) Try to reduce this fear by explaining why the IV line is necessary and exactly what you are going to be doing.

b. Assemble the supplies and equipment needed.

(1) Select the fluid ordered by the physician and inspect the container.

(2) The container should be checked for leakage, contamination, cloudiness, and expiration date.

(3) Select the appropriate infusion set and cannula.

c. Also assemble the following:

(1) Antiseptic cleansing solution (preferably an iodine swab).

(2) Sterile 2 inch x 2 inch gauze dressing.

(3) Adhesive tape cut into strips of appropriate length.

(4) Constricting band (preferably soft rubber).

d. To select a suitable vein:

(1) Apply the constricting band at the casualty's mid-arm above the elbow. Check to make sure that a pulse is still present after the band is in place.

(2) Inspect the hand and forearm for a vein that appears to be straight and lies on a flat surface. It should be well fixed, not roll, and feel springy when palpated. You should avoid:

(a) IV's in those areas that require immobilizing a joint.

(b) Areas where an arterial pulse is palpable close to the vein.

(c) Veins of the lower extremities-which can hamper the casualty's ambulation.

(d) Veins near injured areas or distal to injuries.

e. Prepare the venipuncture site.

(1) Scrub the selected area with iodine swab, starting from the area above the vein.

(2) Wipe the area in widening circles around the site, leaving a wide margin.

f. Enter the vein.

(1) Stabilize the vein by applying pressure on it below the point of entry.

(2) Puncture the skin with the bevel of the pointing upward.

(a) Enter the vein from either side or from above.

(b) You should be able to feel the needle "pop" through into the vein.

(c) When you have entered the vein, blood will return through the needle.

(3) If using an over-the-needle catheter, advance it approximately two millimeters beyond the point where the blood return was first encountered.

(4) Slide the catheter over the needle into the vein and withdraw the needle.

(5) Release the constricting band and connect the infusion line to the catheter.

(6) Observe line for fluid flow in a steady stream. If flow is slow, pull back very slightly on the catheter to move the tip from the wall of the vein.

(7) After a good flow is established, check for infiltration.

(8) Cover the puncture site with povodine-iodine ointment, cover with sterile dressing, and tape the catheter securely in place.

(9) Loop the IV tubing and tape it to the skin adjacent to the infusion site.

CAUTION

Do not tape the connecting point between the catheter and the infusion set.

(10) Adjust the infusion flow to the rate ordered by the physician.

F-10. **Solutions Used in Intravenous Therapy.**

a. Dextrose in water (D5W) solution-used to treat dehydration, to supply small amounts of calories for energy, and to supply water for body needs.

b. Lactate Ringer's solution-resembles the electrolyte structure of normal blood serum. Used to treat dehydration and to restore normal fluid after extracellular shift (a result of burns or infection).

c. Normal saline, 0.9 percent solution-used to correct excessive fluid loss or to correct excessive acid or alkalinity in body fluids.

F-11. **Temporary Nursing Records.**

The following DA Forms are part of the Temporary Nursing Record, and information on these forms can be found in AR 40-407, Chapter 3.

a. DA Form 3872, Nursing Service Personnel Time Schedule.

b. DA Form 3889, Nursing Unit 24-Hour Report.

c. DA Form 3889-1, Nursing Unit 24-Hour Report-Continuation Sheet.

d. DA Form 3950, Temperature, Pulse, and Respiration Record Worksheet.

e. DA Form 3951, Nursing Service-Assignment Roster.

f. DD Form 792, 24-Hour Casualty Intake and Output Worksheet.

g. DA Form 1924, Surgical Checklist.

h. DA Form 4028, Prescribed Medication.

Section III

USE OF THE U.S. FIELD MEDICAL CARD

F-12. **General.**

a. The U.S. Field Medical Card (FMC) (DD Form 2380) (FM 8-10-6) is used to record data similar to that recorded on the ITRCS. The FMC will be used by aid stations, clearing stations, and non-fixed troop or health clinics working overseas, on maneuvers, or attached to commands moving between stations. It may also be used to record an out-casualty visit when the HREC is not readily available at an MTF. The FMC is used in the theater of operations during time of hostilities. It also may be used to record CRO cases.

b. The FMC is made so that it can be attached to the casualty. The cards are issued as a pad, with each pad consisting of an original card, a sheet of carbon paper, a carbon protective sheet, and a duplicate.

c. Use of the FMC is covered by NATO STANAG 2132.

F-13. **NATO STANAG 2348 Requirements.**

The ITRs of NATO personnel treated by Army MTFs are prepared the same as ITRs for other casualties. This applies to DA Form 1380 (Record of Individual Performance of Reserve Duty Training), DD Form 1380, and DD Form 602. In addition, the following policies cover NATO personnel:

a. If a service member is transferred to hospitals of other nations, his ITR will go with him. When he is discharged from an Army MTF, his record will be sent to his national military medical authority (AR 40-400, Table 2-4 for a list of these authorities). Sometimes DD Form 1380 or DD Form 602 (STANAG 2132) will be prepared as well as an ITR. If so, these forms will go with the ITR.

b. The amount of information put in an ITR should be STANDARD for all forces. All items normally recorded for U.S. personnel will be recorded for NATO personnel. In addition, the marital status of the NATO member will be recorded.

F-14. **Preparation of Field Medical Cards.**

a. An MTF officer will complete the FMC or supervise its completion. However, the company aidman first attending the casualty may initiate an FMC. To do this, he will record the name, SSN, and grade of the casualty. He will also briefly describe the medical care of treatment given and enter as much information as time permits. After doing this, he will put his initials in the far right side of the signature block (Item 29). The supervising AMEDD officer will then complete, review, and sign the FMC.

b. An FMC will be prepared for any casualty treated at an MTF. For transfer cases, the FMC will be attached to the casualty's clothing. It will remain with him until his arrival at a hospital, his death and interment (burial), or his return to duty. If a casualty dies, the FMC will remain attached to the body until interment when it will be removed. If the body cannot be identified when it is to be interred, the registration number given the remains by the Graves Registration Service will be noted on the FMC.

c. Under combat conditions, the aidman may only partially complete the FMC for casualties being treated. Otherwise, all entries will be completed as fully as possible. The blocks that must be complete are 1, 3, 4, 7, and 9. The aidman will enter his or her initials in the far right side of the signature block (11). This also applies to the battalion aid station when casualties are being transferred to another MTF during a combat situation. Instructions for completing items on the ITR cover sheet apply to similar items on the FMC; all abbreviations authorized for use on the cover sheet may also be used on the FMC. Except for those listed below, however, abbreviations may not be used for diagnostic terminology.

(1) Abr W - Abraded wound.

(2) Cont W - Contused wound.

(3) FC - Fracture (compound) open.

(4) FCC - Fracture (compound) open comminuted.

(5) FS - Fracture simple (closed).

(6) LW - Lacerated wound.

(7) MW - Multiple wounds.

(8) Pen W - Penetrating wound.

(9) Perf W - Perforating wound.

(10) SV - Severe.

(11) SL - Slight.

d. FMC may also be used for "CARDED FOR RECORD ONLY" cases. Certain cases not admitted to MTF will be CRO. For CRO cases, DA Form 3647 or DD Form 1380 will be prepared; and a registrar number assigned. When DA Form 3647 is used, Items 7, 10, 14, 24, 27, 30, and the name of the admitting officer need not be completed. When the FCM is used, Item 11 need not be completed.

F-15. **Supplemental Field Medical Cards.**

When more space is needed, another FMC will be attached to the original. This second one will be labeled in the upper RIGHT corner "FMC #2" and will show the casualty's name, grade, SSN, and nation.

F-16. **Disposition of Field Medical Cards.**

a. For Casualties Admitted and Discharged and CRO, Cases. The original FMC of CRO case or of an admission with a disposition other than to a hospital will be sent to higher headquarters within the command for coding. After coding, the FMC will be disposed of in accordance with AR 340-18, Dec 83.

b. For Transfer Casualties. When a casualty arrives at a hospital, his FMC will be used to prepare his ITR. This FMC will then become part of his ITR.

c. For Out-casualties. The original of an FMC used to record out-casualty treatment will be filed in the casualty's HREC or OTR.

d. Carbon Copies. All carbon copies of FMC will be destroyed locally after 3 months.

F-17. **DA Form 4006.**

DA Form 4006 (Field Medical Record Jacket) may be used as an envelope for the FMC. To keep the jacket from being opened while the casualty is in transit, pertinent personnel and medical data on the casualty may be recorded on the outside. The movement of the casualty may also be recorded. When the jacket has been so used, it must become a part of the ITR.

F-18. **Instructions for Completing DD Form 1380.**

a. Block 1: Enter casualty's name, rank, and complete SSN. For foreign military personnel (including prisoners of war), enter military service number. Enter military occupational specialty or area of concentration for specialty code. Enter religion. Check appropriate box for sex.

b. Block 2: Enter casualty's unit of assignment and the country of whose armed forces the casualty is a member. Check armed service of the patient, that is, A/T = Army, AF/A = Air Force, NIM = Navy, and MC/M = Marine.

c. Block 3: Use figures to show location of injury or injuries. Check appropriate box(es) to describe casualty injury or injuries

d. Block 4: Check appropriate box.

e. Block 5: Write in the pulse rate and the time that the pulse was measured.

f. Block 6: Check yes or no box. Write in date and time that tourniquet was applied.

g. Block 7: Check yes or no box. Write in dose administered. Write in date and time administered.

h. Block 8: Write in type of solution. Write in time and location given. If additional space is required, use Block 9

i. Block 9: Write in information requested. If additional space is needed, use Block 14.

j. Block l0: Check appropriate box. Write in date and time of disposition.

k. Block 11: Write in signature and unit of medical officer completing form. Write in initials of combat medics initiating form on the right side of block.

l. Block 12: Write in date and time of arrival. Record blood pressure, pulse, and respirations in space provided.

m. Block 13: Document appropriate comments by date and time of observation.

n. Block 14: Document provider's orders by date and time. Record dose of tetanus administered and time administered. Record type and dose of antibiotic administered and time administered.

o. Block 15: Write in signature of provider or medical officer.

p. Block 16: Check appropriate box. Enter date and time.

q. Block 17: This block will be completed by the United Ministry Team. Check appropriate box of service provided. Write in signature of chaplain providing service.

Table F-1. Officer and Enlisted Grade Structure				
ARMY	MARINES	NAVY/COAST GUARD	AIR FORCE	DATA CODES
General of the Army (GA)		Fleet Admiral (FADM)	General of the Air Force (GenAF)	G5
General (GEN)	General (GEN)	Admiral (ADM)	General (GEN)	G4
Lieutenant General (LTG)	Lieutenant General (LtGen)	Vice Admiral (VADM)	Lieutenant General (LtGen)	G3
Major General (MG)	Major General (MajGen)	Rear Admiral (RADM)	Major General (MajGen)	G2
Brigadier General (BG)	Brigadier General (BGen)	Commodore (COMO)	Brigadier General (BrigGen)	G1
Colonel (COL)	Colonel (Col)	Captain (CAPT)	Colonel (Col)	O6
Lieutenant Colonel (LTC)	Lieutenant Colonel (LtCol)	Commander (CDR)	Lieutenant Colonel (LtCol)	O5
Major (MAJ)	Major (Maj)	Lieutenant Commander (LCDR)	Major (Maj)	O4
Captain (CPT)	Captain (Capt)	Lieutenant (LT)	Captain (Capt)	O3
First Lieutenant (1LT)	First Lieutenant (1stLt)	Lieutenant, Junior Grade (LTJG)	First Lieutenant (1Lt)	O2
Second Lieutenant (2LT)	Second Lieutenant (2ndLt)	Ensign (ENS)	Second Lieutenant (2Lt)	O1
Chief Warrant Officer (CW4)	Chief Warrant Officer (CWO4)	Chief Warrant Officer (CWO-4)	Chief Warrant Officer (CWO-4)	W4
Chief Warrant Officer (CW3)	Chief Warrant Officer (CWO3)	Chief Warrant Officer (CWO-3)	Chief Warrant Officer (CWO-3)	W3

Table F-1. Officer and Enlisted Grade Structure (continued)

ARMY	MARINES	NAVY/COAST GUARD	AIR FORCE	DATA CODES
Chief Warrant Officer (CW2)	Chief Warrant Officer (CWO2)	Chief Warrant Officer (CWO-2)	Chief Warrant Officer (CWO-2)	W2
Warrant Officer (WO1)	Warrant Officer (WO)	Warrant Officer (WO-1)	Warrant Officer (WO)	W1
Sergeant Major of the Army (SMA)	Sergeant Major of the Marine Corps (SgtMajMC)	Master Chief Petty Officer of the Navy (MCPON)	Chief Master Sergeant of the Air Force (CMSAF)	E9
Command Sergeant Major (CSM)	Sergeant Major (SgtMaj)	Fleet/Command Master Chief Petty Officer (MCPO)	Chief Master Sergeant (CMSgt)	E9
Sergeant Major (SGM)	Master Gunnery Sergeant (MGySgt)			E9
First Sergeant (1SG)	First Sergeant (1stSgt)	Senior Chief Petty Officer (SCPO)	Senior Master Sergeant (SMSgt)	E8
Master Sergeant (MSG)	Master Sergeant (MSgt)			E8
Platoon Sergeant(PSG) or Sergeant First Class (SFC)	Gunnery Sergeant (GySgt)	Chief Petty Officer (CPO)	Master Sergeant (MSgt)	E7
Staff Sergeant (SSG)	Staff Sergeant (SSgt)	Petty Officer First Class (PO1)	Technical Sergeant (TSgt)	E6
Sergeant (SGT)	Sergeant (Sgt)	Petty Officer (PO2)	Staff Sergeant (SSgt)	E5
Corporal (CPL)	Corporal (Cpl)	Petty Officer Third Class (PO3)	Sergeant (Sgt)	E4
Specialist 4 (SP4)			Senior Airman	E4

Table F-1. Officer and Enlisted Grade Structure (continued)

ARMY	MARINES	NAVY/COAST GUARD	AIR FORCE	DATA CODES
Private First Class (PFC)	Lance Corporal (LCpl)	Seaman (Seaman)	Airman First Class (A1C)	E3
Private (PVT)	Private First Class (PFC)	Seaman Apprentice (SA)	Airman (Amn)	E2
Private (PVT)	Private (Pvt)	Seaman Recruit (SR)	Airman Basic (AB)	E1

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